

ABSTRACT

A magnetic recording medium capable of high-density recording and suitable for linear recording/reproducing and the reproduction of signals using a magnetoresistive head is provided. The magnetic recording medium includes a non-magnetic substrate and a magnetic layer having an oblique columnar structure formed on the non-magnetic substrate. The magnetic layer includes a first ferromagnetic metal thin film and a second ferromagnetic metal thin film whose direction of growth of its oblique columnar structure is the opposite of that of the first ferromagnetic metal thin film. $Mr \cdot \delta$, the product of residual magnetization Mr and film thickness δ , satisfies $3 \text{ (mA)} \leq Mr \cdot \delta < 30 \text{ (mA)}$. Thickness d_1 and thickness d_2 of said first and second ferromagnetic metal thin films, respectively, satisfy $40 \text{ (nm)} \leq d_1 + d_2 \leq 100 \text{ (nm)}$ as well as $1/2 \leq d_2/d_1 \leq 1$. Coercivity H_c of said magnetic layer satisfies $H_c \geq 100 \text{ (kA/m)}$.